Leaflet 503

GROWIH - MANAGEMENT PROGRAM

...a proposed new approach to local planning and zoning

by B. Budd Chavooshian
Dr. George H. Nieswand
Thomas Norman, Esq.

HT 168 N5 C53 1974

DOPERATIVE EXTENSION SERVICE / COOK COLLEGE / RUTGERS UNIVERSITY —
THE STATE UNIVERSITY OF NEW JERSEY AT NEW BRUNSWICK

GROWTH-MANAGEMENT PROGRAM

...a proposed new approach to local planning and zoning

by B. Budd Chavooshian*
Dr. George H. Nieswand**
Thomas Norman, Esq.***

There is currently an increasing general awareness and concern regarding growth and its threat to the environment, the general health and welfare of the public, and the sound development of our communities. At the same time there is a growing dissatisfaction with the processes which deal with growth and development.

This new mood has produced some knee-jerk reactions ranging from restrictive zoning which frustrates attempts at development to unmasked attempts to stop all growth or to set an arbitrary limit to growth.

Increasingly, there is also a genuine effort to develop more rational and acceptable ways of dealing with growth.

The purpose of this article is to describe a <u>conceptual</u> model of a process which is intended not as a substitute to our current

^{*}Land Use Specialist and Program Advisor for Resource Management, Cooperative Extension Service, Cook College, Rutgers University

^{**}Associate Professor, Environmental Systems Analysis, Cook College, Rutgers University

^{***}Member of New Jersey Bar, Visiting Investigator, Institute of Environmental Studies, Rutgers University

institution of planning and zoning but rather as an improvement to existing practice. This process, which we have defined as a growth-management program (GMP), (1) employs a current-capacity determination as a basis to ensure rationality, (2) uses a transfer-of-development-rights (TDR) mechanism to promote essential fairness, and (3) integrates planning, zoning and capital improvements programming to assure comprehensiveness.

PAST PRACTICES AND CURRENT TRENDS IN ZONING

To fully appreciate the development process and to understand some of the basic considerations in the planning system, one must first understand the legal framework within which it operates.

Planning began in a serious way in 1926 with the <u>Euclid</u> decision, ¹ a United States Supreme Court ruling which upheld zoning and essentially accepted the notion that a preconceived approach to growth is more likely to promote the general welfare than is haphazard, fortuitous development.

As a practical matter, for 40 years after <u>Euclid</u>, zoning was implemented on the premise that all land in private ownership was considered developable. In fact, several commentators argued that zoning was not really necessary at all since the marketplace actually

determines the type and extent of development. Reference was often made to Houston, the only United States city of substantial size which does not employ zoning to regulate development. It was pointed out that the patterns of development in Houston were not distinguishable from other cities where zoning was adopted to govern growth.

Natural resource and environmental factors seldom entered into consideration in the planning/regulatory process for a considerable time following Euclid. In many ways the objection, based on constitutional grounds, that regulations to protect and preserve areas of natural or environmental sensitivity are confiscatory prevented a greater use of environmental factors. Indeed, this fear of the "taking issue" was justified in the light of judicial decisions up through the 1960s. In one leading decision the New Jersey Supreme Court found that

...enacting regulations with the practical effect of retaining the meadows in their natural states was for a public benefit. This benefit is twofold, with somewhat interrelated aspects; first, use of the area as a water detention basin in aid of flood control in the lower reaches of the Passaic Valley far beyond the municipality; and second, preservation of the public land as open space for the benefits which would accrue to the local public from an undeveloped use such as that of a nature refuge by wildlife (which paid taxes on it).

However, the court then went on to hold the regulations unconstitutional because, despite their meritorious purpose, they deprived the landowner of the use of his property without just compensation: We cannot agree with the trial court's thesis that, despite the prime public purpose of the zone regulations, they are valid because they represent a reasonable local exercise of the police powers...

In a similar fashion, the Massachusetts Supreme Judicial

Court reached the same conclusion in a different case:

The preservation of privately owned land in its natural unspoiled state for the enjoyment and benefit of the public by preventing the owner from using it for any practical purpose is not within the scope and limits of any power or authority delegated to municipalities under the Zoning Enabling Act. 5

In both decisions local regulations inspired and enacted by local governments were struck down as confiscatory.

Since the advent of "Earth Day" which signalled a greater appreciation and understanding of the environment, a new mood has developed concerning the protection of environmentally fragile areas and the possibility of establishing regional density limits on the basis of health and safety factors. A legislative movement to protect various aspects of the environment which began in 1970 is well documented in The Quiet Revolution in Land Use Control. In New Jersey, for example, the Coastal Area Facilities Review Act was enacted in 1973 to prevent abuses within one of the most valuable resource areas in New Jersey — the coastal zone. Under the act, the commissioner of the State Department of Environmental Protection is vested

with the authority to approve or reject certain specified facilities, with approval hinging on overall impact on natural and human values.

The Coastal Area Facilities Review Act was significant because it represented an effort which began with the adoption of the Wetlands Act in 1970, followed by regulations pertaining to sewer and septic conditions in 1971 and the Flood Plain Protection Act in 1972.

Moreover, natural-resource factors are finally being recognized as among the vital limiting considerations in any rational planning scheme. In addition, while standards relating the impact of various land-use patterns on natural resources may not yet be devised, the importance of these factors to the communities' health, safety, and general welfare is generally accepted. At last count, excluding the Federal Environmental Protection Agency, approximately 20 states have enacted laws establishing varying degrees of protection in this area. This reflects an attitude that critical land can be treated as both a resource and a commodity. It is antithetical to a system which treats all land as only a commodity to be bought or sold and developed as soon as the market is ready, regardless of the environmental implications.

In a significant decision involving essentially the same facts and issues as in the previously cited New Jersey opinion, the Wisconsin Supreme Court upheld in very clear terms zoning regulations enacted under the authority of the state's Wetland Act:

The changing of wetlands and swamps to the damage of the general public by upsetting the natural environment and the natural relationship is not a reasonable use of that land which is protected from police power regulation. 7

This decision, made 10 years after the New Jersey opinion, reflects the changing attitude of the judiciary with respect to unrestricted growth in hazardous situations.

Complementing the environmental trend in planning is the recognition that the rate and sequence of reasonable growth and development must also be timed to take into consideration available water supply, sewer facilities, and similar infrastructure. This approach was accepted by New York's highest court in the Ramapo decision which involved a timing scheme based on the availability of municipal services. The attempt in Ramapo was to coordinate growth with the provision of facilities rather than to prevent development in order to reduce local expenditures.

A word of caution is appropriate at this point. Timing techniques and regulations for environmental protection cannot be based on a single, unjustifiable desire to prevent all development. In such situations, the courts have not hesitated to strike down regulations because they interfered with the constitutional right of freedom of travel, 9 or because they were intended to exclude low- and moderate-income groups. 10

We believe that the force of all of these trends, coupled with the more traditional economic aspects of planning, can provide a better balanced program to guide future growth. However, a major weakness currently institutionalized in the planning process, which relates to fairness and a sense of equity rather than to physical plans, is the notion of windfalls for some and wipeouts for others. 11 We have seen that some courts have accepted regulations prohibiting the use of land for development. In such instances the owners experience an economic wipeout with regard to this land. And yet, other landowners in the same jurisdiction who hold developable land receive a windfall because the open-space regulation enhances the value of their property and they may further be the recipient of highdensity zoning -- an extremely valuable asset. As time continues and more knowledge is developed and concern expressed in the naturalresource sphere, the inequities in the windfall/wipeout situation will be aggravated.

The challenge, therefore, is to adopt a growth policy and program that balances recognized legitimate development needs with valid environmental concerns in a <u>positive</u>, <u>rational</u>, and <u>equitable</u> manner.

MEETING THE CHALLENGE

In cooperation with the New Jersey Division of State and Regional Planning, the authors, with the assistance of an advisory committee, have devoted the past year to an intensive study of the transfer-of-development-rights (TDR) principle in a broader growth-management context. The primary objective of the study was to explore modifications of traditional planning and zoning practice which would relate the type and rate of development to the natural resources, critical areas, existing built environment, and future development potential of a municipality, with due regard for regional needs, socioeconomic factors, established community objectives and fair and equal treatment of property owners.

The study resulted in a conceptual model of a growth-management program (GMP) which insures a compatible relationship between the accommodation of growth and defensible environmental concerns.

The underlying basis of the GMP is <u>current capacity</u> -- the current ability of a municipality to adequately support development -- and zoning regulations which reflect this capacity, rather than some vague or unknown future capacity. Further, as an integral element of the GMP, the total program must be adjusted incrementally as current capacity is increased. The mechanism to overcome the unequal treatment of property owners is the transfer-of-development-rights technique

which makes the GMP both realistic and fair.

THE GROWTH-MANAGEMENT PROGRAM

The basic premises upon which the growth-management program is constructed include:

- 1) establishment of a <u>natural-resource base</u>
- 2) delineation of <u>critical areas</u> to be preserved and precluded from development
- 3) determination of <u>current capacity</u> in terms of "loading factors" by considering:
 - a. natural resources
 - b. critical areas
 - c. existing infrastructure
 - d. existing development
- 4) development of growth-management regulations based on:
 - a. current capacity
 - b. community socioeconomic factors
 - c. community objectives
 - d. regional factors and development plans
- 5) establishment of the <u>transfer-of-development-rights</u> mechanism on the basis of growth-management regulations which:
 - a. permits preservation of critical areas
 - b. may be established on a density, acreage, or combination basis
 - c. incorporates adjustment provisions to maintain consistency with growth-management regulations
- 6) consideration of <u>revisions</u> of current capacity and growthmanagement regulations in an integrated manner, coordinated with a capital improvements program to control both the rate and sequence of development so that they will be expressly consistent with the ultimate development objectives set forth in a growth-management plan.

The following sets forth a step-by-step discussion of the essential elements of the growth-management program.

1. The Natural-Resource Base

The initial step in the GMP involves an inventory and analysis of the natural characteristics of the land that is about to be planned and ultimately developed. This is fundamental and we feel that there is no need for a long rationale on why it is basic to a land-development scheme. However, there is no equally obvious or universal agreement on a definition of what natural characteristics must be considered. In the absence of such a consensus, and on the basis of current experience, it can be assumed that the following are generally available, identifiable, and useful sources of information which should constitute at least a minimum of a natural-resource base:

- 1) Water resource factors
 - a. streams and rivers
 - b. ponds and lakes
 - c. watersheds
 - d. aquifers and recharge areas
- 2) Soil factors
 - a. properties and characteristics
 - b. geology and topography
 - c. water table
 - d. erodability
 - e. septic field capability
- 3) Natural land types
 - a. areas affected by natural hazards
 - b. wetlands, marshes and swamps
 - c. woodlands
 - d. prime agricultural lands
 - e. sites of special or unique scientific or cultural value
- 4) Climatological factors
 - a. prevailing winds
 - b. precipitation
 - c. microclimate

An analysis of this data to determine general affinity to and compatability with development provides the basic knowledge of the raw material -- land -- that is to be planned for development. It becomes, in essence, the base map upon which the plan and land-use regulations are constructed.

It should be noted that further investigation and research is essential to improve the accuracy, reliability, use, and range of the natural-resource data used to enhance this phase of the program.

Furthermore, consideration should be given to the techniques, devices, and administrative procedures necessary to ensure objective, standar-dized inventory procedures. The agency responsible for the development of such procedures could be either private or public.

2. Critical-Areas Delineation

An important element in the GMP is the identification and delineation of critical resource areas which should be preserved and protected from development on the basis of health and safety considerations. Such areas will require delineation. If, as one possibility, 50 percent of all prime agricultural lands, 100 percent of all floodplains, 80 percent of all wetlands, and 60 percent of all aquifer recharge areas were established as the standard, data developed from the natural-resource inventory would be used to delineate these districts

on a growth-management map. If less than 100 percent of a critical area is to be preserved, the selection of the preserved area would have to be based upon sound land-use principles. In such instances, guidelines and criteria established on a statewide basis would be necessary.

Since natural areas do not adhere to municipal boundaries, it is recommended that consideration be given to regional delineation and allocation of certain critical areas and natural resources.

Beyond critical areas that <u>must</u> be preserved, attention should be given to critical areas that <u>should</u> be preserved, such as steep slopes, scenic landscapes, historic areas and sites, etc. Once again, standards and guidelines will be necessary to assure proper selection and delineation by the municipality.

3. Determining Current Capacity

Regardless of zoning, the current capacity of a community should be determined as a function of (1) natural physical characteristics, (2) critical areas that must be preserved, (3) existing infrastructure, and (4) existing development. This becomes the first critical and controversial phase of the GMP because it establishes the current growth potential of the community. Therefore, it must be accurate and reliable.

In this regard, studies would be initiated to determine "loading factors" based on development demands which are satisfied by:

- on-site natural-resource capacity such as, well-water supply, septic-tank capacity, erosion potential, and flood potential
- existing infrastructure providing natural-resource-related capacity to a site such as water supply, sewer capacity, solid waste disposal, and energy
- 3) existing infrastructure providing nonnatural resourcerelated capacity to a site such as roads, schools, etc.

When considered in the aggregate, loading factors would represent the maximum demand that could not be exceeded by development either on a given site or with respect to the comprehensive area. Site factors would be mapped. On a given site, current holding capacity would be related to all of the loading factors affecting the site. These factors would represent the maximum demands in terms of density regulations that development would be permitted to make.

The demands of existing development should be deducted from the total loading factors to determine the increment of new development that could be permitted in a manner consistent with current capacity. The result of this final calculation gives the maximum current growth potential.

Upon determination of its current capacity, a municipality could conceivably zone accordingly and make no provisions for capital improvements for additional future growth and development. Realistically,

this is not likely to happen. Conditions will change (a new trunk line built by the county, a new state highway, a new state facility, increasing regional demands) and the municipality will have to make adjustments in its plan and growth-management regulations. The bridge from the present to the future which establishes the base for ultimate growth is a growth-management plan. This plan is included in the revision process in section 6.

Needless to say, models and standards are essential to insure uniformity and objectivity in determining current capacity. When legislation is being prepared, serious consideration should be given to how these standards and models can best be developed and administered.

4. Growth-Management Regulations

The purpose of growth-management regulations is to guide development in a manner consistent with the preservation of critical resource areas, existing current capacity, socioeconomic factors, community objectives, and regional concerns. In essence, this is the traditional zoning ordinance, developed within a comprehensive planning process, but based upon an explicit current-capacity determination.

The legal instrument of the GMP is the growth-management regulations adopted in ordinance form and designed to allow growth

which cannot exceed the current capacity unless capital improvements are made consistent with a growth-management plan. Development rights would be issued on the basis of these regulations. The intent of the initial growth-management regulations would be to establish a maximum density and intensity of use which could not be exceeded unless improvements were made to expand facilities related to load factors.

The system for the creation, distribution, utilization, and conversion of development rights is directly related to the current density and use regulations, as described below.

5. <u>Transfer-of-Development-Rights Mechanism</u>

The intent in incorporating the transfer-of-development-rights mechanism into the proposed growth-management program is to provide for a more equitable distribution of the windfalls and wipeouts associated with the regulation and development of land. In this way handicaps to effective planning and zoning are considerably reduced and growth is encouraged to proceed from a sound planning basis. At the same time, critical-area preservation is facilitated while citizen participation in the growth process is enhanced.

The basic components of the transfer-of-development-rights mechanism are:

- 1) creation of development rights
- 2) distribution of development rights
- 3) utilization of development rights
- 4) adjustment of development rights
- 5) taxation of development rights

Creation of development rights. The initial creation of development rights would be based on the initial growth-management regulations developed for a community. Two alternative bases for the creation of rights are suggested: (1) density, and (2) acreage. In either case, three primary types of development rights would be created: (1) residential, (2) commercial, and (3) industrial. Within each of these categories, subclass distinctions could be made if judged necessary (e.g., single-family detached and multifamily attached development rights).

Using a <u>density base</u>, development rights would be created corresponding to:

- the total number of dwelling units (or possibly bedroom units) reflected in the growth-management regulations, including existing units
- 2) the total square footage of commercial space reflected in the growth-management regulations, including existing commercial space
- 3) the total square footage of industrial space reflected in the growth-management regulations, including existing industrial space

It should be noted that in each case the development rights created include rights to cover existing development (although these rights would be merged with existing development).

On an <u>acreage basis</u>, the number of development rights created

would simply correspond to (1) residential, (2) commercial, and (3) industrial acreage contained in the growth-management regulations.

If a community's growth-management regulations contain cumulative use zones, some technique would have to be used in creating the development rights for such zones. For instance, questions like what these zones represent in terms of the total residential, commercial, and industrial development that they should accommodate would have to be resolved.

It should be noted that although density and acreage are presented as alternative bases for the creation of development rights, a combination of the two would also be feasible. Based on preliminary research, it appears that a combination of bedroom units for residential development and acreage for commercial and industrial development is the most practical basis for the creation of development rights.

<u>Distribution of development rights</u>. Regardless of the basis used in creating development rights, the distribution of each type of right (residential, commercial, industrial) would be established on the basis of the ratio between the assessed value of each parcel of land in the community and the total assessed value of all land in the community. Every landowner would be entitled to receive a pro-

portionate share of each type of development right based on this ratio but not to exceed the full development potential of developable land as reflected in the growth-management regulations. In the case of existing development, landowners would receive sufficient development rights to cover such development.

Utilization of development rights. In order for any parcel of land to be developed, it would be required that development rights consistent in both type and number with the proposed development be demanded as a condition precedent to the issuance of a building permit. Needless to say, the proposed development would have to conform to the growth-management regulations for the parcel in question. Once a parcel is developed, the development rights exercised would merge with the development until the land was either returned to an undeveloped state or redeveloped or converted into a use requiring a different type and/or number of rights than those originally used. In the case of redevelopment or conversion of use, development rights would have to be obtained to cover such changes. Development rights distributed to landowners for existing development would automatically merge with the developed parcels upon distribution, and filing procedure would record this fact.

The owners of unattached development rights would be free to use them for the development of their own land, subject to the

growth-management regulations on that land, or in the present or at some future date they could place them up for sale in the free market.

Adjustment of development rights. The type and number of development rights that exist must at all times be consistent with the growth-management regulations in a community. As growth-management regulations are changed, development rights will have to be adjusted to maintain the required consistency.

In the case of <u>density-based</u> rights, changes in the growth-management regulations would necessitate (1) the creation and distribution of additional development rights if the changes resulted in increased gross densities for a community and/or (2) the conversion of existing unattached development rights from one type and number to another if the growth-management-program changes resulted in a change in the type of development rights required for a particular parcel (e.g., a change in use from residential to commercial). In such instances, the conversion of unattached rights would be based on the ratio between the number of rights of each type involved in the changes (i.e., an exchange rate would be established for each amendment of the growth-management regulations). On an <u>acreage</u> basis, changes in use would always involve only the conversion of development rights from one type to another. Such conversion would simply be based on an acre-for-acre exchange rate.

The distribution of additional development rights created as a result of an increase in current densities could accrue to all landowners or to the local governing body for the benefit of all community residents. The latter alternative may raise legal questions concerning the exercise of police as opposed to taxing powers.

Taxation of development rights. Development rights would be taxed in a manner similar to real property. Initially, the value of each type of development rights (residential, commercial, industrial) would be determined as a percentage of the assessed value of undeveloped land of each type. Subsequently, sales of development rights in the free market would be used to establish their values. Undeveloped land would continue to be taxed as real property though its assessed value would reflect the separation of development potential. Exercised rights would not be taxed but would be merged with the improvement on the developed land and the improvement would be taxed at its assessed value.

6. The Revision Process

The foregoing sections set forth the basic elements needed to establish a growth-management program as generally depicted in the first stage of the illustration appended to this report. This section, depicted in the second stage of the illustration, deals with the revision

process, which is essentially an updating or adjustment process based on a long-range view of community and regional growth. Many aspects of this process have been treated in the foregoing sections to permit each element to be presented in its entirety.

Specifically, any revisions of current-capacity and growth-management regulations must be accomplished in an integrated manner, coordinated with a capital improvements program to control both the rate and sequence of development so that they will be expressly consistent with the ultimate development objectives set forth in a growth-management plan. In short, current capacity cannot be increased and reflected in the growth-management ordinance <u>unless</u> the infrastructure is expanded as set forth in the capital improvements program.

The essential components of this revision process are:

- 1) a mandatory long-range growth-management plan
- 2) a mandatory 5-year capital improvements program related specifically to the densities and uses proposed in the growth-management plan and the growth-management regulations
- 3) a mandatory 5-year review process requiring a reexamination of the GMP.

In essence, the jurisdiction would have five years following the adoption of the initial growth-management regulations to prepare for the revision process.

Since a vital element of the GMP is the determination of current

capacity, which in turn is the basic foundation of the growth-management regulations, it is essential in developing a long-range growth-management plan to make a careful reanalysis of the determinants of current capacity -- natural resources, critical areas, existing infrastructure, and existing development patterns. This reanalysis provides a frame of reference for the various ramifications and implications of long-range socioeconomic factors, long-range community objectives, and long-range regional factors in relation to the development of a growth-management plan.

It should also be noted that a revision of the growth-management regulations would have to be accompanied by an adjustment of development rights as set forth in section 5.

SUMMARY AND CONCLUSIONS

In summary, the growth-management program presented here is proposed as a local planning and zoning process that will realistically balance growth with environmental concerns. Its main emphasis is the determination of current capacity, and its primary mechanism for implementation is the transfer of development rights. Owners of land in both the preserved critical areas and the developable areas share in the benefits of community development since the realization of full development potential is dependent upon the purchase and sale of these development rights. In essence, the GMP is intended to

tie zoning to a more rational and definable base, and to eliminate the inequities in the traditional zoning process.

The growth-management program described in this article exists as a conceptual model. However, sufficient legal research is presently available to justify the statutory enactment of a growth-management program based on the reasonable expectation that the concept will be upheld as a valid approach to guide growth. It should be apparent though, that its application to specific government jurisdictions will require considerably more than mere legal justification. It will also require specific types of research to transform the model from its conceptual form to a form that can be implemented with a minimum of administrative and technical complexity. The authors are currently pursuing and intend to continue an analysis of all issues, ramifications and implications of the model. At this time, the authors have identified very specific research areas, including a framework for a legislative proposal and model ordinances, and are currently engaged in these activities.

<u>ACKNOWLEDGMENTS</u>

The authors wish to acknowledge with genuine thanks and appreciation the Hon. Sidney L. Willis, assistant commissioner, New

Jersey Department of Community Affairs, and Mr. Richard Ginman, director of the Division of State and Regional Planning, New Jersey Department of Community Affairs, without whose encouragement and support this work would not have been possible.

The authors also acknowledge with deep appreciation the following who agreed to serve with them on an advisory committee to assist in defining the basic framework within which the GMP model was developed:

- Teuvo M. Airola, research intern, Department of Environmental Resources, Cook College, Rutgers University
- Richard Binetsky, acting chief, Bureau of Regional Planning, Division of State and Regional Planning, New Jersey Department of Community Affairs
- Roy DeBoer, professor of landscape architecture, Department of Horticulture and Forestry, Cook College, Rutgers University
- Stephen Decter, assistant research professor, Department of Environmental Resources, Cook College, Rutgers University
- Richard Ginman, director, Division of State and Regional Planning, New Jersey Department of Community Affairs
- James Jager, Esq., Division of State and Regional Planning, New Jersey Department of Community Affairs
- Chester Mattson, environmental planner, Hackensack Meadowlands Development Commission
- Dr. Ernest Reock, director, Bureau of Government Research, Rutgers University
- Ralph Seligman, professional planner

Finally, the authors wish to thank Dean Charles E. Hess of Cook College, Rutgers University, and Dr. John L. Gerwig, Director of the Cooperative Extension Service, Cook College, Rutgers University, for their approval and support of this research project.

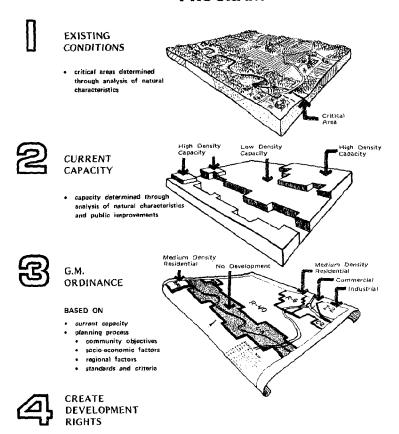
NOTE: The authors regret that in their original work on transfer-of-development rights — the TDR Legislative Proposal for New Jersey and the article "Transfer of Development Rights: A New Concept in Land Use Management" — they inadvertantly omitted the name of Dr. George H. Nieswand, who served as project coinvestigator. In addition, the widespread distribution of this work brought to their attention the efforts of three other people who previously had made a contribution to promoting TDR as a device to preserve open space. Therefore, we wish to acknowledge:

- Armand Beliveau, St. George, Vermont, who conceived TDR as a way to plan and develop St. George and still retain its rural characteristics
- John J. Costonis, professor of law, College of Law, University of Illinois, whose important contribution to TDR is currently available in his recent book, Space Adrift
- Gerald Lloyd, of Robert Martin Corp. who published an article in the <u>Urban Land Institute Technical Bulletin</u> 40 in 1961 suggesting the use of TDR to preserve open space.

FOOTNOTES

- ¹Village of Euclid v. Amblea Realty Co., 272 U.S. 365 (1926).
- ²See, for example, Bernard H. Siegan, <u>Non-Zoning in Houston</u>, 13 Journal of Law and Economics 71 (1970).
- ³Morris County Land Improvement Co. v. Parsippany-Troy Hills Twp., 193 A. 2d 232 at 240 (1963).
 - 4 <u>Ibid</u>., at 242.
- ⁵MacGibbon v. Board of Appeals of Duxbury, 255 N.E. 2d 347 at 351 (1970).
 - ⁶Fred Bosselman and David Callies (1971).
 - 7 Just v. Marinette County, 201 N.W. 2d 761 at 768 (1972).
- ⁸Golden v. Planning Board of Town of Ramapo, 334 N.Y.S. 2d 138, 285 N.E. 2d 291 (1972).
- ⁹Construction Industry Assoc. of Sonoma County v. City of Petaluma _____F. Supp.____ (N.D. Cal. 1974).
- 10 Oakwood at Madison v. Madison Twp. 117 N.J. Super. 11 (1971).
- ¹¹Dr. Donald Hagman, U.C.L.A., is currently involved in a study intended to document this process.
- $^{12} Actually$, our investigations started approximately $2\frac{1}{2}$ years ago when an intensive study of the TDR mechanism was begun. See "Transfer of Development Rights: A New Concept in Land Use Management", Rutgers University, 1973.

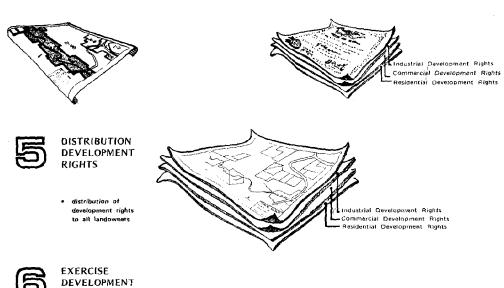
FIRST STAGE



BASED ON

OPTION

 community selection of capacity target as prescribed by the G.M. ordinance (can be less than or equal to current capacity)





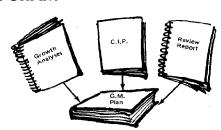
GROWTH MANAGEMENT PROGRAM

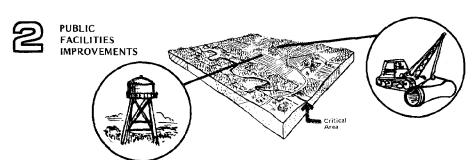
SECOND STAGE

GROWTH MANAGEMENT PLAN

BASED ON

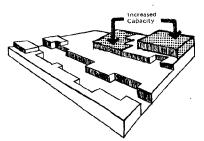
- long range growth studies
- capital improvement program
 periodic review process







determined through analysis of new public improvements

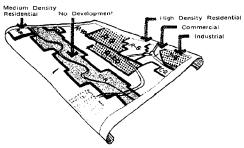




REVISED G.M. **ORDINANCE**

BASED ON

- new capacity
- planning process





CREATE AND SELL ADDITIONAL **DEVELOPMENT RIGHTS**

conducted by municipality through bidding with proceeds going to municipality





EXERCISE DEVELOPMENT OPTION



LAND

DEVELOPMENT RIGHTS

CAPITAL

COASTAL ZONE INFORMATION CENTER



The Cooperative Extension Service provides information and educational services to all people without regard to race, color, or national origin.

An Equal Opportunity Employer

Distributed in cooperation with U.S. Department of Agriculture in furtherance of the Acts of Congress of May 8 and June 30, 1914.

Cooperative Extension Service work in agriculture, home economics, and 4-H, John L. Gerwig, director.

7-74-5M

